K955844

SUMMARY OF SAFETY AND EFFECTIVENESS INFORMATION

JUL 26 1996

1. Submitter:

Varian Oncology Systems

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Prepared:

December 20, 1995

2. Device Name:

Applicators and Accessories for Varian VariSource

Remote High Dose Rate Afterloader

3. Predicate

Omnitron PulmoCath K901615/F

Device:

Cleared on November 27, 1992

Omnitron GYN Applicator System

K913908/B

Cleared on March 6, 1992

Applicators for Varian VariSource Remote High Dose

Rate Afterloader

K952913

Cleared on November 22, 1995

4. Description:

The applicators for the Varian VariSource Remote High Dose Rate Afterloader are part of a remote controlled radionuclide applicator system, including an electromechanical device to enable an operator to apply, by remote control, a radionuclide source of high activity to be placed at various internal or surface body locations for radiation brachytherapy. The shape and materials of the applicator determine

where it will be located for treatment.

5. Intended Use:

The Varian VariSource Remote High Dose Rate Afterloader system, including the applicators included in this notification, is a device intended to be used by properly trained and licensed medical personnel to provide radiation brachytherapy with a high specific activity radioisotope source to reduce the exposure times required to achieve a prescribed dose. Remote operation of the Afterloader eliminates the necessity of exposing medical personnel to radiation during hand loading or hand placement of radioactive sources on or within the body of a patient. The radioactive source is iridium-192, encapsulated in the end of a wire stored in the Afterloader and mechanically driven from it to a precisely described position for a specified dwell time during treatment. Between treatments the wire is retracted into the Afterloader and the source resides in a tungstenshielded safe to limit personnel exposures to an acceptable, safe level. The Afterloader contains a radiation detector which signals whenever the source is not in the safe.

6. Technological Considerations:

The applicators for the Varian VariSource Remote High Dose Rate Afterloader are identical or equivalent to the predicate devices in materials. Where a certain predicate device applicator contains low density polyethylene, the equivalent Varian applicator also contains low density polyethylene. Where a certain predicate device applicator contains PTFE and stainless steel, the equivalent Varian applicator contains PTFE and stainless steel.